Anti-pAkt [S473]-152Sm

Catalog: 3152005A
Package size: 50 tests
Storage: Store product at 4 °C. Do not freeze.
Cross-reactivity: Rat, Mouse, Human, Bovine, Canine, Porcine, Hamster, Monkey

Technical Information

Validation: Each lot of conjugated antibody is quality control-tested by CyTOF® analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended usage: The suggested use is 1 µL for up to 3 x 10^6 live cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.

Description

Akt, also known as PKB or Rac, is an intracellular serine/threonine protein kinase critically involved in several pathways including apoptosis, cell cycle and energy regulation. Akt integrates growth factor signaling through PI3K and is activated in a two-step process involving a priming phosphorylation at Thr308 by PDK1 followed by phosphorylation at Ser473 by mTOR complex 2 (mTORC2). Activated Akt promotes protein translation and cell growth by activating mTOR complex 1 (mTORC1). Akt prevents degradation of cyclin D1, thereby promoting G1 entry. Akt also promotes cell survival by inactivating the pro-apoptotic protein Bad.

References
